

CLAIMS

1        1. A grid array signal conducting arrangement comprising at least one differential grid array  
2 conductor pair and at least one non-differential grid array conductor pair, the at least one differential  
3 grid array conductor pair having portions thereof which are more closely spaced in comparison to a  
4 spacing of corresponding components in the at least one non-differential grid array conductor pair.

1        2. A grid array signal conducting arrangement as claimed in claim 1, where the grid array  
2 signal conducting arrangement is provided in a grid array connector provided on at least one of a  
3 receiving substrate and a semiconductor package.

1        3. A grid array signal conducting arrangement as claimed in claim 1, where the grid array  
2 signal conducting arrangement conducts at least one differential pair signal.

1        4. A grid array signal conducting arrangement as claimed in claim 3, where the grid array  
2 signal conducting arrangement provides at least one of greater coupling and greater common noise  
3 between the differential grid array conductor pair than the non-differential grid array conductor pair.

1        5. A grid array signal conducting arrangement comprising:  
2            at least one differential grid array conductor pair and at least one non-differential grid array  
3 conductor pair; and  
4            means for providing noise rejection capability in the grid array signal conducting  
5 arrangement.

6. A grid array signal conducting arrangement as claimed in claim 5, where the grid array signal conducting arrangement is provided in a grid array connector provided on at least one of a receiving substrate and a semiconductor package.

7. A grid array signal conducting arrangement as claimed in claim 5, where the grid array signal conducting arrangement conducts at least one differential pair signal.

8. A grid array signal conducting arrangement as claimed in claim 7, where the grid array signal conducting arrangement provides at least one of greater coupling and greater common noise between the differential grid array conductor pair than the non-differential grid array conductor pair

9. An electrical component comprising:  
at least one of a receiving substrate and a semiconductor package; and  
a grid array signal conducting arrangement comprising at least one differential grid array conductor pair and at least one non-differential grid array conductor pair, the at least one differential grid array conductor pair having portions thereof which are more closely spaced in comparison to a spacing of corresponding components in the at least one non-differential grid array conductor pair.

10. An electrical component as claimed in claim 9, where the grid array signal conducting arrangement conducts at least one differential pair signal.

11. An electrical component as claimed in claim 10, where the grid array signal conducting arrangement provides at least one of greater coupling and greater common noise between the

3 differential grid array conductor pair than the non-differential grid array conductor pair.

1 12. A mounted electrical component arrangement comprising:

2 a plurality of electrical components; and

3 a grid array signal conducting arrangement comprising at least one differential grid array  
4 conductor pair and at least one non-differential grid array conductor pair, the at least one differential  
5 grid array conductor pair having portions thereof which are more closely spaced in comparison to a  
6 spacing of corresponding components in the at least one non-differential grid array conductor pair.

1 13. A mounted electrical component arrangement as claimed in claim 12, where the grid array  
2 signal conducting arrangement is provided in a grid array connector provided on at least one of a  
3 receiving substrate and a semiconductor package.

1 14. A mounted electrical component arrangement as claimed in claim 12, where the grid array  
2 signal conducting arrangement conducts at least one differential pair signal.

1 15. A mounted electrical component arrangement as claimed in claim 14, where the grid array  
2 signal conducting arrangement provides at least one of greater coupling and greater common noise  
3 between the differential grid array conductor pair than the non-differential grid array conductor pair

1 16. A method of increasing noise rejection capability of a grid array signal conducting  
2 arrangement comprising:

3 orientating electrical conductive parts in the grid array signal conducting arrangement that

- 4 conduct differential signals so as coupling distance between at least one pair of differential signals  
5 is less than coupling distance between at least one pair of non-differential signals; and  
6 conducting at least one pair of differential signals through the electrical conductive parts.

- 1 17. A method as claimed in claim 16, where the grid array signal conducting arrangement is  
2 provided in a grid array connector provided on at least one of a receiving substrate and a  
3 semiconductor package.